

COUNTY BOROUGH



OF SOUTHPORT

# REPORT

UPON THE

## HEALTH & SANITARY CONDITION

OF THE

County Borough of Southport,

FOR THE YEAR 1908,

BY

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# County Borough of Southport,

1908.

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**Southport** is situated on the north-west coast of Lancashire, on the south side of the Ribble Estuary, 18 miles to the north of Liverpool, and about 35 miles by rail from Manchester. Aspect, north-west.

**Site and Soil.**—The district is for some miles around a flat one, with sandy soil. The houses, except the business premises in the centre of the town, are mostly detached or semi-detached, with large gardens. The streets are broad, and many of them planted down both sides with trees.

There are in the Borough many large **Institutions**, such as the Southport Infirmary, several Convalescent Hospitals and Homes, Sanatoria, a large number of Schools, and a considerable number of Hotels (both large and small).

**The Water Supply** is obtained from deep wells near Ormskirk, about eight miles from Southport, belonging to the Southport, Birkdale, and West Lancashire Water Board, and is, though rather hard, of exceptional purity. The hardness is principally due to carbonate of lime, and is removed to a considerable extent by boiling. The analysis, by Dr. Thresh, of London, will be found towards the end of this Report.

**Drainage** is partly by gravitation and partly by pumping into the sea, the sewer outlet being about three miles to the north of the town. New and extensive works for pumping and treatment of the sewage on the most modern bacteriological principles have recently been erected at the outlet and are now in use.

Population of Southport at Census, 1901 .....	48,083
Estimated Population at middle of 1908.....	53,318
Area of Borough (excluding Foreshore, 6,824 acres) in acres .....	4,233
Birth-rate, per 1,000 living, in 1908.....	16.84
Death-rate   ,,   ,,   ,,   excluding deaths of visitors ...	11.35
Gross Death-rate .....	12.94
Death-rate from the seven principal Zymotic Diseases.....	0.49
Deaths of Infants under one year of age per 1,000 births.....	104

Date of Incorporation, June, 1867.

TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE  
OF THE COUNTY BOROUGH OF SOUTHPORT.

GENTLEMEN,—

The principal features of the following Report are as follows:—

The birth-rate, although slightly higher than during the previous two years, was 2.04 per 1,000 below the average of the previous ten years.

The gross death-rate of 12.94 per 1,000 was the lowest on record.

The "local" death-rate of 11.35 per 1,000, which is the death-rate obtained after excluding the deaths of moribund visitors, was also the lowest on record.

The zymotic death-rate, that is the death-rate from the principal infectious diseases, of .49 per 1,000, was, with two exceptions, the lowest on record.

The infantile mortality death-rate of 104 per 1,000 was also, with two exceptions, the lowest on record.

#### VITAL STATISTICS.

The population of Southport, as estimated by the Registrar-General to the middle of 1908, was 53,318.

Assuming the sex distribution to have been the same in 1908 as it was at the time of the Census in 1901, the respective numbers of males and females were, in 1908, as follows:—

Males .....	22,009
Females .....	31,309

These figures show the proportion of males to females to be as 100 males to 142 females, and an excess of females over males of 9,300.

The births registered in Southport during the year were 898, of which 437 were males, and 461 females. The resultant birth-rate was 16.84 per 1,000 of the population, which is a trifle higher than the birth-rate of the previous year, but is 2.04 per 1,000 lower than the average for the previous ten years. This rate was at the highest point of which we have any record in 1877, when it was 33.87 per 1,000. Since that date it has, with slight fluctuations, steadily fallen to its present figure, which, with two exceptions, is the lowest recorded.

The birth-rate of the country generally in 1908 was 26.5 per 1,000.

The number of deaths which occurred in the Borough, and in the Borough Infectious Diseases Hospital in Moss Lane (which, although situated just beyond the Borough Boundary, is counted here as within the boundary), was 690, of which 309 were of males, and 381 of females. These figures give a gross death-rate of 12.94 per 1,000 of the population, against 14.34 per 1,000 the previous year, and is the lowest gross death-rate recorded.

The improvement in the gross death-rate will be made more evident when I state that in 1900, the year of my appointment as Medical Officer of Health, the gross death-rate of Southport was 16.57 per 1,000—a difference, when compared with 1908, of 3.63 per 1,000 of the population in favour of the latter year. Had the same death-rate prevailed in 1908 as prevailed in 1900, there would in the population of 53,318 have been 193 more deaths in Southport in 1908 than actually occurred, and estimating each of these lives saved at the low figure of £100 each, a saving to the community was obtained in 1908 of £19,300—to say nothing of the expense saved by the less amount of sickness in families where sickness occurred without deaths, for it is, of course, obvious that in proportion to the number of deaths in a community there is always a much larger amount of sickness which does not end fatally.

The above figures show that even from a pecuniary point of view, an excellent return is being obtained for the time, thought, and money spent by the Corporation in promoting the health of the community.

If from the above 690 deaths are deducted 85 deaths of visitors who came into the town in a precarious state of health, and died after only a short stay here, there remain 605 deaths, from which, by calculation, is obtained a "local" death-rate of 11.35 per 1,000, also the lowest "local" death-rate recorded.

The 85 visitors who came into the Borough in a more or less moribund condition were rather less in number than in the previous year.

The average length of stay in Southport of these visitors was 72 days, and varied from one day in the shortest case to 11 months in the longest case. The principal causes of death among these visitors were in numerical importance as follows:—Heart Disease (17), Cancer (12), Bronchitis and Asthma (8), Cerebral Hæmorrhage (7), and Kidney Disease, Pulmonary Tuberculosis, and Rheumatism (4 deaths each).

The Zymotic death-rate, or in other words the death-rate from the seven principal Zymotic diseases, viz.: Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever, and Diarrhœa, was .49 per 1,000, which, with two exceptions, is the lowest Zymotic death-rate on record in the Borough. The average rate for the previous ten years was .82 per 1,000.

#### CONSUMPTION OF THE LUNGS.

The number of deaths in the Borough due to Consumption of the Lungs during the year 1908 was 55, and from other tubercular diseases 15 deaths. The following figures, taken from Table IV. at the end of this and previous reports, show the number of deaths from this and other tubercular diseases occurring among persons living at the time of death in the Borough, and also among persons belonging to Southport but who died outside the Borough:—

Year.	No. of Deaths from Consumption of Lungs.	No. of Deaths from other Tubercular Diseases.	Total Deaths from all forms of Tubercular Disease.
1900	65	20	85
1901	54	19	73
1902	40	25	65
1903	37	19	56
1904	56	22	78
1905	60	14	74
1906	72	9	81
1907	66	24	90
1908	55	15	70

From this table it will be noticed that while there was a steady decline in the total number of these cases during the first four years of the period covered—that is, from 1900 to 1903—during the following four years there was an increase again up to last year, which shows some improvement.

Among the efforts made to check tubercular disease, especially in the form of Consumption of the Lungs, notices against spitting in public places continue to be put up in our trams, on our railway stations, and elsewhere. The milk supply is also kept under constant observation in order to prevent the milk of tuberculous cows being sold in the Borough, though fortunately there is evidence of very little of such milk coming into the Borough.

Also after a death from these diseases, an offer is made by the Health Department in all cases to disinfect gratuitously any rooms which may have been occupied by the deceased person, and also any clothing which he or she may have used. These offers of disinfection are accepted to some extent by the public, but not to as great an extent as is desirable.

The voluntary notification of Consumption of the Lungs has been in force in Southport since 1901, but has been made little use of.

The large number of deaths from tubercular disease, in spite of the above precautions, is to be regretted. To further check the disease, probably the adoption of some means of more effectually isolating the individual cases in a suitable hospital is desirable, as, apart from infection from milk and meat, it is no doubt by infection from a previous case that the large majority of cases arise, and this source, by better isolation of the individual cases, would be cut off. As a matter of experience it has been found elsewhere that where a greater number of cases of Consumption of the Lungs are treated in special hospitals, the number of cases in the district generally has diminished.

TABLE SHOWING COMPARATIVE RATES FOR DIFFERENT PARTS  
OF THE BOROUGH.

(Calculated on the nett figures for the five years, 1904 to 1908 inclusive, as given in Tables II. and IV., at the end of this and previous Reports).

	Average Population.	Birth Rate (per 1000 of population).	Death Rate (per 1000 of population).	Infantile Death Rate (per 1000 Births).	Cancer Death Rate (per 1000 of population).	Consumpti'n of Lungs Death Rate (per 1000 of population).
The Six Central Wards, or the business portion of the Borough .....	30,432	14.41	14.17	117	1.15	1.33
Scarisbrick and Sussex Wards combined, especially a working-class district	11,762	28.77	14.42	107	1.02	1.24
Park Ward, a wealthy residential Ward .....	5,402	5.78	12.85	109	1.67	.56
Hesketh Ward, including Churchtown and Crossens, the most rural Ward in the Borough .....	4,248	20.95	14.88	110	.71	.89

The above table gives some comparative rates for different divisions of the Borough. The birth-rate, it will be seen, as in previous years, is highest (28.77 per 1,000) in the combined Scarisbrick and Sussex Wards, which are principally occupied by the working classes, and is lowest (5.78 per 1,000) in Park Ward, a Ward chiefly occupied by retired people.

The highest and lowest death-rates also, it will be seen, occurred respectively in the same Wards as the highest and lowest birth-rates.

#### INFANTILE DEATH-RATE.

The number of infants who died in the Borough during the year 1908 under one year of age, and including one child belonging to Birkdale who died in the Southport Infirmary, was 93. The number of births during the year was 898, so that the infantile death-rate was 104 per 1,000. This is, with two exceptions, the lowest infantile death-rate previously recorded in the Borough. The average rate for the last ten years previous to 1908 was 134 per 1,000.

During the year Nurse Raitt, who, under the arrangement made between the Corporation and the District Nursing Society, had devoted practically the whole of her time to visiting the mothers of infants, and giving advice and help in the management and care of children, resigned her position, and Nurse Hopner was appointed in her place.

As bearing on the question of infantile mortality, it may be recorded here that the Notification of Births Act, 1907, was adopted by the Southport Corporation, and came into force in the Borough on February 1st, 1908. Under this Act, medical men and midwives are called upon to notify to the Medical Officer of Health, within 36 hours after the event, the births of all children attended by them. The information so obtained is of great value in the way of preventing early deaths of infants, as previous to the adoption of the above Act, a period of six weeks or more after a birth could elapse before knowledge of that birth was obtained by us, and, in fact, in many cases the death of a child was certified to us before the knowledge of the birth had reached us.

By the earlier information of the birth, obtained under the new Act, the Nurse is now so much earlier enabled to keep a kindly eye on the career of the infant.

### INFECTIOUS DISEASES HOSPITAL.

The Hospital contains accommodation altogether for 88 patients. Three wards respectively contain 22 beds, 16 beds, and 10 beds. In addition there is a special pavilion, with accommodation for 20 patients, erected for and maintained by the Private Schools Association; and there is also a special pavilion on another site, with 12 beds, for cases of Smallpox. With the exception of two of the older pavilions which are becoming somewhat dilapidated externally from age, all these buildings are in good sanitary condition.

During last year, on an additional two acres of ground, adjoining the present site, an observation ward of eight beds was erected, and this ward and one of the older wards, which are at some distance from the administration block, have been connected together, and to the administration block by telephones. An alarm bell, which can be rung in case of need from the distant wards and from the administration block, has also been erected.

The sewage of the Hospital is efficiently dealt with by means of a small installation of bacterial filter beds.

### INFECTIOUS DISEASES.

In addition to such diseases as Scarlet Fever, Diphtheria, Smallpox, and others, which are ordinarily compulsorily notifiable in other towns, the following diseases are compulsorily notifiable in Southport, viz.: Chicken Pox, Measles, and Whooping Cough. Consumption of the Lungs is voluntarily notifiable.

The total number of cases of infectious disease notified in the Borough during the year is shown in Table III. at the end of this Report.

### SCARLET FEVER.

The number of cases of Scarlet Fever notified during the year was 104, of which 79 were removed to hospital. Further particulars are given in Tables VI. and VII. at the end of this Report.

The following table shows the number of cases notified in the Borough during recent years, and the number of these removed to hospital:—

	No. of Cases of Scarlet Fever notified in the Borough.	No. of Cases Removed to Borough Hospital.	Percentage of Cases Removed to Hospital.
1900 .....	237 .....	147 .....	62 per cent.
1901 .....	230 .....	160 .....	69 , , ,
1902 .....	131 .....	92 .....	70 , , ,
1903 .....	162 .....	121 .....	74 , , ,
1904 .....	333 .....	261 .....	78 , , ,
1905 .....	247 .....	177 .....	70 , , ,
1906 .....	180 .....	142 .....	78 , , ,
1907 .....	88 .....	60 .....	68 , , ,
1908 .....	104 .....	79 .....	76 , , ,

In connection with the administration of Infectious Diseases Hospitals, the question of "return cases" often engages the attention of the Medical Officers. By "return case" is here meant a case of the same disease arising among other members of a household within one week or ten days after the return home of a patient from the hospital. Such cases are found to arise at most hospitals, even though the greatest care be taken to see that the hospital patient is apparently quite free from infection on leaving the hospital. Our experience of such cases has been somewhat curious. Following the erection and use of a specially-built discharging block a few years ago, the number of "return cases" for a time appeared to distinctly increase. Defects in the heating apparatus of the discharging block, and the escape of noxious fumes from the gas stoves by back-draught to such an extent that some of the patients and even the nurses were affected by them, were found and remedied. Acting on the theory also that possibly, if not probably, some of the "return cases" were due to the setting up of catarrhal conditions in the patients, due to the complete change for them from an artificially warmed hospital ward to a more usual, natural, and less artificial conditions at the average home, we have endeavoured for the last two years to make the change less sudden, and on the actual day of discharge have not allowed the temperature of the final bath to be any higher than is absolutely necessary. The result of our endeavours has so far been satisfactory, as is shown in the following table. While the percentage of "return cases" up to two years ago was a little over 5 per cent. (5.24) since that time it has been less than 1 per cent. (viz., .72 per cent.).

#### "RETURN CASES" OF SCARLET FEVER.

	No. of Cases of Scarlet Fever Treated in Hospital.	No. of "Return Cases."	Percentage of "Return Cases."
1901 .....	160 .....	7 .....	4.37
1902 .....	92 .....	5 .....	5.44
1903 .....	121 .....	7 .....	5.79
1904 .....	261 .....	15 .....	5.75
1905 .....	177 .....	10 .....	5.65
1906 .....	142 .....	6 .....	4.22
1907 .....	60 .....	0 .....	0
1908 .....	79 .....	1 .....	1.26

#### DIPHTHERIA AND MEMBRANOUS CROUP.

There were 34 cases of Diphtheria notified in 1908, as against 19 notified in 1907. The average number for the previous ten years was 32. Nine of the cases were fatal.

### ENTERIC OR TYPHOID FEVER.

The number of cases of this disease notified during the year was 16, which is three more than in the previous year. The number of deaths was two. The average annual number of cases for the previous ten years was 27, and the average number of deaths 5.

### CHICKEN POX, MEASLES, AND WHOOPING COUGH.

Of the first of these diseases, there were 163 cases notified, against 81 in the previous year. There were no deaths.

The number of cases of Measles notified was 189, with two deaths, and of Whooping Cough 348 cases, with six deaths. In the previous year the numbers were respectively 449 cases with seven deaths, and 227 cases with four deaths.

### CANCER, MALIGNANT DISEASE.

The number of deaths from Cancer which occurred in the Borough during 1908 was, after deducting the deaths of non-residents in Public Institutions, 57. The number of deaths for each of the last eight years was as follows: 62, 46, 52, 56, 56, 67, 59, and 57. This death-rate varies considerably, as shown in an earlier table, for different parts of the Borough, Park Ward having the highest Cancer death-rate, viz., 1.67 per 1,000, and Hesketh Ward the lowest, viz., .71 per 1,000. The combined Scarisbrick and Sussex Wards have a rate of 1.02 per 1,000, and the six central Wards a rate of 1.15 per 1,000. This difference is in accord with the usual experience of Cancer and other forms of malignant disease, viz., that they are more prevalent among the leisured and elderly people than among the younger and more active portions of the population.

### THE ELEMENTARY SCHOOLS OF THE BOROUGH.

As in previous years the Elementary Schools, buildings, and offices have been kept under constant supervision, and defective children examined by me either at the schools or at the Health Office. Where the children have been considered unfit to attend school, certificates to that effect have been given to them by me, excusing them from attendance from school. Those that required treatment of some length have been advised to seek advice from their own medical man or at the Southport Infirmary.

The system of requiring a child, on returning to school after the holidays, to bring a certificate from its parents to the effect that to the best of their knowledge their child has been free from infection, and has not been in contact with any case of infectious disease during the preceding three weeks, has been maintained with apparently decided advantage to the health of the children.

During the year Dr. Bradburne has examined the eyesight of a large number of school children, and certified many of them as requiring glasses. Considerable difficulty has been found in getting glasses for some of the poorer children. This matter will, however, probably be more satisfactorily dealt with when the more thorough medical inspection of the children in the schools is taken in hand in the coming year.

With the view of assisting the Education Committee in drawing up a scheme for the medical inspection of the children in the Southport Elementary Schools, in September, I made the following Report to the Education Committee:—

**TO THE CHAIRMAN AND MEMBERS OF THE  
EDUCATION COMMITTEE.**

**LADIES AND GENTLEMEN,**

In compliance with the instructions of the Committee, I beg to make the following suggestions for the carrying out of the Medical Inspection of the Children in the Southport Public Elementary Schools, as required under Section 13 of the Education (Administrative Provisions) Act, 1907.

In Southport at the present time there are about 6,000 children on the books of the Elementary Schools, and taking the school life of each pupil to be about ten years, it is evident that about 600 children will leave the schools every year, and another 600 children will come into the schools every year to make up for the loss in numbers of those who have left.

According to the Memorandum of the Board of Education (paragraph 12) provision has to be "made by each authority, when "the Act has been sufficiently in operation for normal working, "for the inspection in each year of (a) the children newly admitted, "(b) the children in the school who have matured for the second "inspection, (c) those who have matured for their third inspection, "and where practicable (d) of those about to leave school." In the first year (1908), however, the Board are only insisting upon the examination of those children who have newly arrived in the school, and those who are leaving—a total in Southport, as shown above, of 1,200 children. "In the second year (1909) the Board "will be satisfied with the inspection of those newly admitted and "those leaving, with the addition of those who have matured for "their second inspection"—a total in Southport of 1,800 children to be inspected in 1909. When the Act is in full working order there will be four inspections of 600 children at each inspection, making a total of 2,400 children to be annually inspected. It is clear that this number of children to be inspected will be the minimum, as it stands to reason that on the discovery of any defects at any of these examinations in any of the children, it will be necessary for the child to be carefully watched and examined from time to time in order to note any improvement or the reverse.

For the purpose of carrying out the above work, I consider it will be necessary for (1) a school nurse and (2) an assistant medical Officer to be appointed.

The duty of the school nurse will be to get the children, especially the girls and infants, ready for the inspection by the Medical Officer; to assist the Medical Officer in the inspection of the children, especially in such matters as cleanliness of body

and clothing of the children, and in a considerable amount of the clerical work of recording names, addresses, ages, weights, heights, etc., of the children; in arranging for the attendance at the inspections of the parents of the children, as suggested in the Memorandum of the Board of Education; in applying or showing parents how to apply remedies for minor ailments; also in advising on such matters as the antiseptic treatment of discharging ears, treatment of sores and minor skin diseases, or minor diseases of the eye, such as blepharitis and conjunctivitis, the treatment of slight injuries resulting from accident.

If the above duties, and other work which I suggest further on she might do, did not fully take up her time, her services would be available in visiting the homes of the children, and her help and advice to parents would, I have no doubt, be very valuable in further promoting the improved sanitation of the Borough.

The duty of the School Medical Officer would be to make the actual medical inspection of each child and to be responsible for filling up the forms in all details requiring special medical knowledge, such as the state of the child's heart, lungs, nose, throat, nervous system, vision, mental condition, etc. The amount of time required to be given by the School Medical Officer to the examination of each child has been variously estimated as from ten minutes per child to half-an-hour per child. Only by actual experience of the work can it be discovered how much time is really necessary for the work, but it seems to me that an examination of any child which took only ten minutes, and in that ten minutes to be included an interview with the child's parents, who are to be specially invited to be present at such examination, would be of the nature of a farce, and hardly respectful to parents, particularly working-class parents, who had sacrificed their time to be present.

The School Medical Officer's duties would also include, as the circular No. 596 of the Board of Education clearly shows, the general supervision of the schools "in respect of such matters as "the surroundings, ventilation, lighting, warming, equipment, and "sanitation, including observations on the type and condition of "sanitary conveniences and lavatories, water supply for washing "and drinking purposes, the cleanliness of schoolrooms and cloak- "rooms, arrangements for drying children's cloaks and boots, and "the relation of the general arrangement of the school to the "health of the children."

It would also be the duty of the School Medical Officer to make an annual report, in which, in addition to the work mentioned above, a general description must be made of all arrangements made for the co-relation of the school medical service with the public health service, and for the organisation and supervision of medical inspection, and an account of the methods of inspection adopted, also a general statement of the extent and scope of the medical inspection carried out during the year; also a general

review of the facts disclosed by medical inspection under the headings contained in the Board of Education's circular 582, including tables showing height and weight of children inspected; also a general review of the relation of home circumstances and social and industrial conditions to the health and physical condition of the children inspected; also a review of the methods employed and available for the treatment of defects, such as defective eyesight, carious teeth, etc.; also a review of action taken to prevent the spread of infectious disease; also a review of methods adopted and the adequacy of such methods for dealing with blind, deaf, mentally or physically defective and epileptic children under the Acts of 1893 and 1899; also a review of (1) the methods and results of instruction in personal hygiene and temperance in the schools, (2) the methods and results of physical or breathing exercises in the schools, (3) arrangements for open-air schools, school camps, etc., under Article 44 (g) of the Code of 1908.

Also an account of miscellaneous work, such as the examination of scholarship candidates, pupil teachers, or teachers of any grade—truly, as the circular states, a formidable catalogue of work to be done.

With regard to salaries, I venture to suggest that, in the case of the school nurse especially, a good salary should be offered, say of at least £100 a year. The work of the nurse, dealing as it will do with matters of cleanliness of person and clothing of large numbers of the children, is one which will require great delicacy and tact on her part, and such work as can, in my opinion, only be done by a nurse of considerable education, experience, and refinement. If it is attempted by a nurse without these qualifications, I can only anticipate great opposition and friction from the parents, and absolute failure in the work. I therefore suggest that a salary likely to attract such a nurse be offered.

It has seemed to me possible that the same nurse who was appointed by the Education Committee could also act for the Health Committee in dealing with the Infantile Mortality question. This, too, is work requiring great tact and good sense. The Health Committee are at present paying £50 a year to the District Nursing Society for the services of a nurse for this purpose. The nurse, however, of the District Nursing Society who was doing this work has recently severed her connection with the Society, and, in view of the possible rearrangement of the work here suggested, only a temporary arrangement has been made with the District Nursing Society. I should state that the District Nursing Society much regret the possible severance of the connection, which has been in existence for some few years, between their Society and the Southport Corporation, but on economic grounds there appears to me to be good grounds for the step. The £50 at present paid by the Health Committee, added to £50 from the Education Committee, would make a salary of £100 a year for the nurse, and the nurse would be entirely under the control of the Corporation. The only question that arises in my mind is whether or not, by combining the two posts, there would be too much work for one nurse, but perhaps the experiment might be tried, and if found unsuccessful abandoned later.

With regard to the salary of the Assistant School Medical Officer, I can only mention that, judging from the advertisements which have recently appeared in the Medical Press, the salary offered at similar places to Southport varies from £150 to £250 a year.

I would suggest also that to give an additional inducement to a medical man to apply for such post, the officer appointed be entitled "Assistant Medical Officer of Health," as such title would be found to be to his interest in any future applications he may make for other posts.

I am, Ladies and Gentlemen,

Your obedient Servant,

JOHN J. WEAVER.

September 5th, 1908.

This Report was adopted by the Education Committee on September 9th, 1908, and a School Medical Officer and School Nurse were subsequently appointed, though it was decided by the Council that the duties of the School Medical Officer should be independent of the work of the Health Department, and that the School Nurse should devote the whole of her time to the work of the Education Committee.

#### SLAUGHTER-HOUSES AND MEAT AND FOOD INSPECTION.

The five Private Slaughter-houses in the Borough and the Public Slaughter-house at Blowick, have been, as in previous years, regularly visited during the year, and a careful supervision of them maintained. The Market Hall, private shops, pig dealers' premises, and the ice cream vendors' premises have been regularly visited.

During the year four tuberculous pigs and a pig's head were surrendered by the owners.

At the Public Slaughter-houses, three beasts were found badly affected with tuberculosis, and these, with one beast killed at a Private Slaughter-house, were seized and destroyed.

Eight beasts, which were found slightly affected with tuberculosis, were passed as fit for food after the removal and destruction of the diseased parts.

There were also destroyed ten sheep found dead in the fields and in the cattle pens.

Four cases of nuisance arising from pig-keeping were reported to the Committee, and the nuisances abated.

One calf, four boxes of fish, four tins of prawns, fifty tins of tinned peas, and one box of frozen pork, were also surrendered and destroyed.

## DAIRIES, COWSHEDS, AND MILKSHOPS.

The above premises have been regularly visited during the year, and their condition and that of all milk-supplying cows, both within the Borough, and also by virtue of the powers obtained in the Southport Corporation Act of 1900, as far as possible outside the Borough, kept under careful observation.

During the year, 62 samples of milk were chemically analysed. Of these, 52 were found to be genuine and of good quality. Of the remaining ten, three contained a small quantity of boric acid, and six samples were short of milk fat to the extent of 10, 10, 6, 5, 3, and 3 per cent. respectively. The vendor of one of the samples deficient in fat to the extent of 10 per cent. was prosecuted, and had to pay costs. All the other vendors were written to and warned by the Town Clerk. One sample taken informally had 6 per cent. of added water.

Thirty samples of milk were examined bacteriologically. Of these, four were certified to be tubercular. Although careful investigation and examination by the Veterinary Surgeon of the cattle on the farms from which the sample was taken was made, no diseased animal could then be found. Several cows, however, had been removed or sold from the farms between the time of taking the sample and our knowledge of the result of the bacteriological examination.

Two new cowsheds have been erected in the country districts during the year, and improved ventilation has been provided in other shippens.

In the Borough one old shippenn has been abolished, and a new and improved shippenn provided.

Many samples of milk have been taken on its arrival by the early morning trains. In some cases the milk has been found dirty, and the producers warned.

## HOUSE TO HOUSE INSPECTION.

During the year, house to house inspection, including in all cases an examination of the drains of the premises, has been systematically carried out by Inspectors Halsall, Cadwell, and Peet. The following streets have, during the year, been dealt with, viz.: Ivy Street, Larch Street, Poplar Street, Norwood Road, Tithebarn Road, and parts of Hart Street, Sussex Road, and Oak Street. In all, 967 houses and premises were inspected and reported upon. Although no very serious defects have been found, in almost every case some defects were found, and these have since been remedied.

## PUBLIC WATER SUPPLY.

The town's water is supplied by the Southport, Birkdale, and West Lancashire Water Board, and is obtained from deep wells in the New Red Sandstone near Ormskirk, about eight miles from Southport. Though somewhat hard from the presence of carbonate of lime (which, however, is partly removed on boiling), it is, as the analysis (a copy of which will be found at the end of this Report) by Professor Thresh, of London, shows, of exceptional purity.

### SEWER VENTILATION.

Some few years ago, on account of the number of complaints of offensive smells arising from open manholes in the streets, the matter of sewer ventilation engaged for some time the very serious and constant attention of the Health Committee. After trying various measures at considerable expense and trouble, with more or less success, it was finally decided to close all surface manhole grids as far as practicable, and ventilate the sewers by means of Webb's Patent Ventilating Lamps. This policy was commenced at the end of the year 1901, was more completely carried out in 1903 and 1904, and has since been maintained with excellent results. For several years now there has hardly been a complaint of sewer smells, and never from one of the lamps, and coincidentally with the adoption of this policy there has been, as will be seen in Tables VI. at the end of this Report, a very marked decrease in the number of cases of, and deaths from, Typhoid Fever in the Borough.

### NEW SEWAGE WORKS AT CROSSENS.

The new Sewage Works recently erected at Crossens, at a cost, including the cost of the land, of about £35,000, are now in working order. They are intended to deal with the whole of the sewage of Southport, and consist of six large sedimentation tanks, and six (to be increased ultimately to fifteen) continuously acting bacterial filters, with other complementary parts. By these means an excellent effluent is being obtained, and an uninterrupted flow of the sewage maintained at all states of weather or tide.

### GENERAL SANITARY WORK.

The following table shows the nature and amount of work done during the year by the Highway Department under orders sent to it by the Health Department, and also the corresponding figures for the two preceding years:—

	1906.	1907.	1908.
Houses re-drained .....	35 .....	26 .....	81
House drains unstopped .....	521 .....	550 .....	567
Midden privies converted into W.C.'s.....	2 .....	8 .....	18
Wet ash pits converted into dry.....	2 .....	5 .....	18
Sundry structural nuisances abated .....	892 .....	1313 .....	1814
—	—	—	—
Totals.....	1452 .....	1902 .....	2498

The following table shows roughly the amount and nature of the work done by the Inspectors of Nuisances:—

	1906.	1907.	1908.
Nuisances reported to Health Committee .....	1626 .....	1580 .....	2103
Nuisance Inspections not reported to Health Committee .....	16816 .....	14336 .....	12957
Visits to Workshops (and reports) .....	434 .....	599 .....	463
,, Bakehouses (and reports) .....	178 .....	163 .....	74
,, Laundries .....	15 .....	9 .....	10
Visits to Dairies, Cowsheds, and Milkshops ...	233 .....	322 .....	364
,, Common Lodging Houses .....	291 .....	200 .....	228
Visits under Shop Hours Act .....	95 .....	58 .....	—
Visits in connection with offensive trades .....	95 .....	100 .....	50
Notices served .....	1415 .....	1477 .....	1412
Houses without proper Water Supply reported...	4 .....	0 .....	4
Smoke Prevention observations .....	4 .....	5 .....	13
Houses disinfected .....	243 .....	181 .....	189
Enquiries into notifications of Infectious Diseases	864 .....	904 .....	872
Removal of Cases to Hospital .....	162 .....	75 .....	102
Houses examined and reported as unfit for habitation .....	1 .....	2 .....	0
Visits to Ice Cream Vendors .....	28 .....	24 .....	40
,, Piggeries .....	356 .....	460 .....	500
Examinations and Testing of House Drains and Sanitary Fitments .....	249 .....	397 .....	1071
Sanitary Certificates issued.....	16 .....	20 .....	17

#### SAMPLES OF FOOD AND DRUGS TAKEN FOR ANALYSIS.

Under the provisions of the "Sale of Food and Drugs Acts," the following samples were taken:—

	No. of Samples taken.	Result.
Milk .....	62 .....	52 samples were found genuine. Of the remaining ten samples, three contained respectively 3.5 grains, .87 grains, and 1-10th grain of boric acid per pint; six samples were deficient in milk fat to the extent of 10, 10, 6, 5, 3, and 3 per cent. respectively; one sample, taken informally, had 6 per cent. of water added. The vendor of one of the samples showing 10 per cent. deficiency of milk fat was prosecuted, and was ordered to pay costs. All the other vendors were warned by letter from the Town Clerk.
Butter .....	28 .....	All genuine.
Lard .....	10 .....	All genuine.

	No. of Samples taken.	Result.
Sausages .....	5 .....	All contained boric acid, the amount varying from 38.2 grains per lb. to 8.68 grains per lb.
Brawn .....	2 .....	One sample contained 17.4 grains per lb. of boric acid.
Potted Beef.....	1 .....	Contained 22.5 grains per lb. of boric acid.
Potted Shrimps .....	4 .....	All contained boric acid, the amount varying from 58.15 grains per lb. to 14.32 grains per lb. The vendor of the sample containing 58.15 grains per lb. was prosecuted and fined 20s. and costs
Potted Lobster .....	4 .....	One sample was found not to contain any lobster. The vendor was fined 20s. and costs. One sample previously taken informally was found not to contain any lobster, and another sample contained 27.7 grains per lb. of boric acid.
Sugar .....	3 .....	All genuine.
Fish Paste with Lobster.....	4 .....	Two samples taken informally were found to contain large quantities of boric acid. Two samples subsequently taken formally contained 56.44 and 43.4 grains per lb. of boric acid. The vendors were prosecuted, but the cases were dismissed on the ground that the amount of boric acid present was not shown to be injurious.
Potted Shrimps and Salmon	5 .....	Two samples contained respectively 63.3 grains and 67.7 grains per lb. of boric acid. On prosecution the cases were dismissed.
Cream .....	1 .....	One sample contained .23 per cent. of boric acid.
Pepper .....	9 .....	Genuine.
Cheese .....	2 .....	„
Cocoa .....	4 .....	„
Coffee .....	3 .....	„
Cornflour .....	1 .....	„
Arrowroot .....	1 .....	„

	No. of Samples taken.	Result.
Potted Turkey and Tongue..	1 .....	Taken informally: contained 3.47 grains per lb. of boric acid.
Shredded Beef Suet .....	2 .....	One sample contained 20 per cent. of rice flour; the other, taken informally, contained 19.16 per cent. of flour.
Chopped Beef Suet.....	2 .....	One sample contained 22 per cent. of wheat flour. In this and preceding case proceedings were inadvertently delayed too long for them to be taken. Further samples are being taken.
Chopped Suet.....	1 .....	Genuine.
Peppermint Cordial .....	1 .....	„
Soda Water .....	2 .....	„
Vinegar .....	1 .....	„
Ginger Ale .....	1 .....	„

160

Of the above samples, 116 were taken formally and 44 informally.

#### THE ADMINISTRATION OF THE FACTORY AND WORKSHOP ACTS.

The condition of the Factories and Workshops in the Borough was, on the whole, satisfactory. The principal defects found were want of cleanliness, insufficient ventilation, and in some cases want of separate closet accommodation for the two sexes; also a few of the water-closets were not sufficiently screened off, and there were no fastenings on the doors. The premises of all home-workers were visited, and found to be clean and in a satisfactory condition.

The lists of out-workers were in all cases forwarded twice a year without default.

No legal proceedings were taken during the year.

The eight underground bakehouses comply with all requirements of the Sanitary Authority, and are, strictly speaking, only called (in the case of five of them), "underground" bakehouses because parts of the bakehouse only are underground.

The sanitary condition of the bakehouses generally in the Borough was good.

#### MIDWIVES ACT OF 1902.

The number of midwives enrolled in Southport at the end of 1908 was 22, and the duties imposed upon the Corporation by the Midwives Act have been carried out during the year, and all the midwives visited and their case books, appliances, etc., examined by Miss Hallam, temporarily acting as a Sanitary Inspector. Their attention has also during the year been called to the importance of taking the temperature and pulse of patients, with a view of obtaining early information of puerperal fever, etc.

At the end of this Report will be found five tables of statistics, made out according to the forms required by the Local Government Board; two tables dealing with Infectious Diseases; a table of the Vital Statistics of Southport for the last 38 years; and a Report on the administration of the Factory and Workshop Acts in Southport.

The Meteorology of Southport and District is dealt with separately in the Annual Reports of the Fernley Observatory by Mr. J. Baxendell, F.R.Met.S.

I am, Gentlemen,

Your obedient Servant,

JOHN J. WEAVER.

Town Hall, Southport.

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#### ANALYSIS OF SOUTHPORT WATER.

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##### PROF. THRESH'S REPORT ON A SAMPLE OF WATER FROM THE SOUTHPORT MAINS.

The analyses appended are (1) the ordinary sanitary analysis, and (2) the determination of the saline constituents.

The former shows that the water maintains its exceptional organic purity; it is free from the slightest trace of polluting matter, and no purer water could possibly be obtained. The hardness remains practically the same as when previously examined.

The saline constituents have not varied to any appreciable extent, and there is no salt present which in the least degree is of an objectionable character.

This constancy in composition, and its extraordinary organic purity, renders the water admirably adapted for all the purposes of a public supply to such an important health resort as Southport.

##### DATA RESPECTING A SAMPLE OF WATER FROM THE BOROUGH OF SOUTHPORT.

Received September 5th, 1905.

Labelled: "Sample of Town's Water drawn from a tap connecting direct with main at 134, Sefton Street, Southport. Date taken, September 4th, 1905."

Particulars of Source: Deep Wells in New Red Sandstone.

## PHYSICAL EXAMINATION.

Turbidity: Quite clear and bright. No deposit.

Colour: Blue tint. Odour: None.

## CHEMICAL EXAMINATION.

Determinations.	Grains per gallon.	Results in Parts per 100,000.
Total Solid Matter dried at 180° C.....	24.3	..... 34.7
Chlorine .....	2.0	..... 2.8
Equivalent to Chlorides (60% Cl.)...	3.3	..... 4.7
Nitric Nitrogen .....	0.026	..... 0.037
Equivalent to Nitrates (17% N.).....	0.15	..... 0.22
Nitrites .....		Absent.
Hardness: Permanent, 6°; Temporary, 13.5°; Total .....	19.5°	.....
Lead, Copper, Zinc, Iron.....		Absent.
Free Ammonia .....	0.0003	..... 0.0004
Organic Ammonia .....	0.0000	..... 0.0000
Oxygen absorbed at 98° F. in three hours	0.0170	..... 0.0240

## ESTIMATION OF THE SALINE CONSTITUENTS.

The results obtained corresponded to the parts as under:—

	Per 100,000.	Per 70,000 or Grains per gallon.
Calcium Carbonate .....	17.5	..... 12.25
Magnesium Carbonate .....	7.0	..... 4.90
Magnesium Sulphate .....	2.25	..... 1.57
Sodium Sulphate .....	2.75	..... 1.93
Sodium Chloride .....	4.6	..... 3.22
Sodium and Potassium Nitrate.....	.25	..... .18
Silica, etc. .....	.3	..... .25
 Total Solids dried at 180° C .....	 34.7	 24.30

JOHN C. THRESH, D.Sc. Lond., M.D., Vict.,

Lecturer on Public Health, London Hospital,

Author of "Water and Water Supplies," &c., &c.

Public Health Laboratories,  
London Hospital,  
London, E.

# FACTORY AND WORKSHOP ACTS.

The following Report is made out in accordance with the requirements of the Home Office, to whom a copy of this Report has to be sent.

## Factories, Workshops, Laundries, Workplaces, and Homework.

### I.—INSPECTION.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR INSPECTORS OF NUISANCES.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
FACTORIES .....	38	4	None.
(Including Factory Laundries.)			
WORKSHOPS .....	242	14	None.
(Including Workshop Laundries.)			
WORKPLACES .....	17	1	None.
Total .....	297	19	None.

### 2.—DEFECTS FOUND.

Particulars.	Number of Defects.			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
<i>Nuisances under the Public Health Acts—*</i>				
Want of Cleanliness .....	16	16	None.	None.
Want of Ventilation .....	5	5	„	„
Overcrowding.....	None.	None.	„	„
Want of Drainage of Floors .....	1	1	„	„
Other Nuisances.....	16	16	„	„
(insufficient .....	None.	None.	„	„
Sanitary Accommodations { unsuitable or defective .....	16	4	„	„
not separate for sexes .....	1	None.	„	„
<i>Offences under the Factory and Workshop Act—</i>				
Illegal occupation of Underground Bakehouse (S. 101) .....	None.	„	„	„
Breach of special Sanitary Requirements for Bakehouses (SS. 97 to 100) .....	„	„	„	„
Other Offences .....	„	„	„	„
Total.....	55	42	„	„

\* Including those specified in sections 2, 3, 7 and 8, of the Factory and Workshop Act as remediable under the Public Health Acts.

|| Section 22 of the Public Health Acts Amendment Act, 1890, has been adopted in Sonthport. The standard of sufficiency and suitability of sanitary accommodation for persons employed in factories and workshops is in accordance with the Sanitary Accommodation Order of 4th February, 1903.

## 3.—HOME WORK.

NATURE OF WORK.*	OUTWORKERS' LISTS, SECTION 107.								Inspections of Outworkers' Premises.	Instances	Notices Served.	Outwork in Unwholesome Premises Section 108.				
	Lists received from Employers.				Addresses of Outworkers.											
	Twice in the Year.		Once in the Year.		Received from other Councils.	Forw- arded to other Councils.										
	Lists.	C n- trac'rs	Work- men.	Lists.	Con- trac'rs	Work- men.										
<b>Wearing Apparel—</b>																
Making, &c. ....	26	6	60	6	3	28	...	20	25	...	...	...				
Lace, lace curtains & nets..	...	...	7	1	...	1	1	...	...	...	...	...				
Furniture and Upholstery..	2	...	...	2	...	2	...	...	...	...	...	...				
Umbrellas, &c. ....	2	10	...	6	6	...	...	...	...	...	...	...				
Racquet and Tennis Balls..	6	...	...	3	3	...	...	...	...	...	...	...				
Nets, other than Wire Nets	2	...	...	1	1	...	...	...	...	...	...	...				
Basket Making .....	2	...	2	1	...	...	...	...	...	...	...	...				
Total .....	40	16	69	20	13	31	1	20	25	...	...	...				

No occupier gives out work of more than one of the classes specified in column 1.

## 4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year.	Number.
Dressmakers .....	
Milliners .....	
Tailors .....	
Bakers .....	
Boot and Shoe Makers .....	
Joiners .....	480
Plumbers .....	
Upholsterers .....	
Jewellers .....	
Cabinet Makers .....	
Total number of workshops on Register .....	480

## 5.—OTHER MATTERS.

Class.	Number.
Matters notified to H.M. Inspectors of Factories—	
Failure to affix Abstract of the Factory and Workshop Act (S. 133) .....	12
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Act (S. 5) Notified by H.M. Inspector .....	5
Reports (of action taken) sent to H.M. Inspector.....	4
Cases of working longer than the prescribed time.....	2
Underground Bakehouses (S. 101)—	
Certificates granted during the year .....	None.
In use at the end of the year.....	8

February 4th, 1909.

JOHN J. WEAVER,

*Medical Officer of Health.*

\*The Lists are received twice in each year. The year's figures in the Table are those obtained by adding together the two half-yearly totals.



TABLE I.  
Vital Statistics of Whole District during 1908 and Previous Years.  
COUNTY BOROUGH OF SOUTHPORT.

Year. 1	Population estimated to middle of each year. <b>2</b>	Births.			Total Deaths Registered in the District			Deaths of Non- Residents registered in Public Institutions beyond the District. <b>11</b>	Deaths of Non- Residents registered in Public Institutions in the District. <b>10</b>	Deaths at all Ages belonging to the District. <b>13</b>
		Number. <b>3</b>	Rate.* <b>4</b>	Number. <b>5</b>	Rate per 1000 Births registered <b>6</b>	Under 1 year of age. <b>7</b>	At all Ages. <b>8</b>			
1898	46,149	979	21.21	135	138	720	15.71	56	28	31
1899	46,844	1009	21.54	167	165	816	17.46	71	37	30
1900	47,550	969	20.38	140	144	788	16.57	68	23	35
1901	48,250	937	19.42	153	163	779	16.15	56	27	24
1902	48,500	942	19.42	134	142	743	15.32	64	27	30
1903	49,669	904	18.20	125	138	718	14.45	64	29	25
1904	50,385	882	17.51	114	129	720	14.29	51	22	31
1905	51,107	921	18.02	103	112	694	13.58	50	20	26
1906	51,837	849	16.38	98	115	751	14.49	57	23	29
1907	52,574	881	16.76	86	98	754	14.34	61	21	41
Averages for years 1898-1907	49,286	927	18.88	125	134	748	15.23	60	26	30
1908	53,318	898	16.84	93	104	690	12.94	67	28	44
										706
										13.24

\* Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.

NOTE.—The deaths included in Column 7 of this table are the whole of those registered during the year as having actually occurred within the district or division. The deaths included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term "Non-residents" is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere.

The "Public institutions" taken into account for the purposes of these Tables are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, workhouses, and lunatic asylums. A list of the Institutions in respect of the deaths in which corrections have been made is given below.

Total population at all ages .....	48,083
Number of Inhabited Houses .....	9511
Average Number of Persons per House .....	5.05
Area of District in acres (exclusive of area covered by water).....	4233

I.	II.	III.
Institutions within the District receiving sick and infirm persons from outside the District.	Institutions outside the District receiving sick and infirm persons from the District.	Other Institutions, the deaths in which have been distributed among the several localities in the District.
Children's Sanatorium.	Moss Lane Infectious Diseases Hospital.	
Convalescent Home.	Ormskirk Workhouse.	
Convalescent Hospital.	Home for the Blind, Roe Lane	
Home for the Blind, Roe Lane	Hydropathic Hospital.	
Hydropathic Hospital.	County Lunatic Asylum,	
Southport Infirmary.	Lancaster.	
Bradstock-Lockett Home.		

The Union Workhouse is not within the District.



TABLE II.  
Vital Statistics of separate Localities in 1908 and previous years.  
COUNTY BOROUGH OF SOUTHPORT.

NAMES OF LOCALITIES.	WHOLE DISTRICT.				1.—SIX CENTRAL WARDS, (being especially the business portion of the Borough)				2.—SCARISBRICK and SUSSEX WARDS (especially working-class districts)				3.—PARK WARD (a wealthy, residential ward)				4.—HESKETH WARD (including Churchtown and Crossens, the most rural ward in the Borough)				
	Population estimated to middle of each Year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each Year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each Year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each Year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each Year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	
YEAR.	a.	b.	c.	d.	a.	b.	c.	d.	a.	b.	c.	d.	a.	b.	c.	d.	a.	b.	c.	d.	
1898.....	46,149	979	723	135		The	present	arrangement of	Wards,	out of	which	the above	localities	are	formed,	was	made in	1898.			
1899.....	46,844	1009	809	167																	
1900.....	47,550	969	800	140	27,911	448	464	56	10,788	384	166	67	4955	32	60	3	3896	105	62	9	
1901.....	48,250	937	776	153	28,322	466	463	81	10,947	350	193	56	5027	22	55	1	3954	99	65	18	
1902.....	48,500	942	746	134	28,469	459	454	62	11,004	358	175	60	5053	27	64	5	3974	98	53	7	
1903.....	49,669	904	714	125	29,155	443	426	61	11,269	333	178	52	5175	34	57	2	4070	94	53	10	
1904.....	50,385	882	729	114	29,575	421	413	64	11,431	347	184	42	5250	31	68	2	4129	83	64	9	
1905.....	51,107	921	700	103	29,999	439	424	50	11,595	351	148	37	5325	31	65	4	4188	100	63	12	
1906.....	51,837	849	757	98	30,428	417	452	51	11,761	331	175	40	5401	26	75	2	4247	75	55	16	
1907.....	52,574	881	774	86	30,861	438	472	46	11,928	314	174	27	5478	32	64	4	4307	97	65	10	
Average of years 1898 to 1907	49,280	927	753	125																	
1908.....	53,318	898	706	92	31,298	428	395	40	12,097	344	167	35	5555	36	75	5	4368	90	69	12	

NOTE.—(a) The separate localities adopted for this table are areas of which the populations are obtainable from the census returns.

(b) Deaths of residents occurring in public institutions beyond the district are included in sub columns c of this table, and those of non-residents registered in public institutions in the district excluded.

(c) Deaths of residents occurring in public institutions, whether within or without the district, are allotted to the respective localities according to the addresses of the deceased.  
Sub-column c of "whole district" corresponds with column 12 in Table I.



TABLE III.—CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR, 1908.  
COUNTY BOROUGH OF SOUTHPORT.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.						TOTAL CASES NOTIFIED IN EACH LOCALITY.				NUMBER OF CASES REMOVED TO HOSPITAL FROM EACH LOCALITY.			
	At all Ages.	At Ages—Years.					1	2	3	4	1	2	3	4
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.								
Smallpox .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria (including Membranous Croup) ...	34	...	7	21	1	5	...	20	4	7	3	15	3	4
Erysipelas.....	17	...	...	1	1	12	3	8	4	2	3	...	...	...
Scarlet Fever .....	104	...	19	70	12	3	...	74	20	8	2	62	14	3
Typhus Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever .....	16	...	...	4	6	6	...	5	4	2	5	2	1	1
Relapsing Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever .....	1	...	...	...	1	...	...	...	...	...	1	...	...	...
Plague .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chicken Pox .....	163	10	64	80	8	1	...	60	68	20	15	...	...	...
Measles .....	189	10	75	79	24	1	...	152	14	21	2	...	...	...
Whooping Cough.....	348	35	177	130	2	4	...	166	109	12	61	...	...	...
Totals .....	872	55	342	385	55	32	3	485	223	72	92	79	18	7
														2

NOTE.—The localities adopted for this table are the same as those in Tables II. and IV.

*Isolation Hospital*—Moss Lane Hospital, in the West Lancashire Rural District. Total available beds, 88.

Number of Diseases that can be concurrently treated, 6.



TABLE IV.

## Causes of, and Ages at, Death during Year 1908.

CAUSES OF DEATH.	Deaths at the Subjoined Ages of "Residents," whether occurring in or beyond the District.							Deaths at all Ages of "Residents," belonging to Localities, whether occurring in or beyond the District.				TOTAL DEATHS IN PUBLIC INSTITU- TIONS IN THE DISTRICT
	All Ages. 2	Under 1. 3	1 and under 5. 5	5 and under 15. 6	15 and under 25. 7	25 and under 65. 8	65 and up- wards. 9	Scaris- brick and Sussex Wards. 10	Park Ward. 11	Hes- keth Ward. 12		
Small-pox .....	...	...	...	...	...	...	...	...	...	...	...	
Measles .....	2	2	...	...	...	...	2	...	...	...	...	
Scarlet Fever .....	I	...	...	1	...	...	...	I	...	...	I	
Whooping Cough .....	6	5	1	...	...	...	I	2	I	2	...	
Diphtheria (including Membranous Croup) .....	9	...	2	6	...	I	...	6	I	I	7	
Croup .....	...	...	...	...	...	...	...	...	...	...	...	
{ Typhus .....	...	...	...	...	...	...	...	...	...	...	2	
Fever { Enteric .....	2	...	...	...	...	2	...	I	I	...	...	
Other continued .....	...	...	...	...	...	...	...	...	...	...	...	
Epidemic Influenza .....	15	...	...	...	...	8	7	I0	2	2	I	
Cholera .....	...	...	...	...	...	...	...	...	...	...	...	
Plague .....	...	...	...	...	...	...	...	...	...	...	...	
Diarrhoea* .....	6	4	2	...	...	...	5	...	...	I	I	
Enteritis* .....	II	I0	...	...	...	I	...	3	5	I	2	
Puerperal Fever .....	I	...	...	...	...	...	...	...	...	I	...	
Erysipelas .....	...	...	...	...	...	...	...	...	...	...	...	
Phthisis (Pulmonary Tuberculosis) .....	55	...	...	3	50	2	39	I3	I	2	...	
Other Tuberculous Diseases .....	I5	3	5	2	I	4	...	6	7	...	2	
Cancer, Malignant Disease* .....	57	...	...	...	...	36	I2	35	I3	7	3	
Bronchitis .....	44	8	2	...	...	7	27	25	I0	4	5	
Pneumonia .....	22	3	4	I	I	8	5	I5	4	2	I	
Pleurisy .....	I	...	...	...	...	...	I	...	I	...	...	
Other Diseases of Respiratory Organs.	9	...	...	...	...	4	5	5	2	...	2	
Alcoholism, Cirrhosis of Liver .....	8	...	...	...	...	3	5	3	...	4	I	
Venereal Diseases .....	...	...	...	...	...	...	...	...	...	...	...	
Premature Birth .....	I9	I9	...	...	...	...	...	I2	5	I	I	
Diseases & Accidents of Parturition .....	I	...	...	...	...	I	...	I	...	...	...	
Heart Diseases .....	I3	2	...	I	3	47	60	65	24	I2	I0	
Accidents .....	9	...	...	4	...	4	I	4	4	I	4	
Suicides .....	5	...	...	...	I	4	...	4	I	...	4	
All other causes .....	295	36	I2	4	3	8I	I58	I53	7I	38	33	
All causes .....	706	92	29	I9	I3	260	293	395	I67	75	69	
											67	

\* See Notes at back.

#### NOTES TO TABLES IV. AND V.

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(a) In Table IV., all deaths of "Residents" occurring in public institutions, whether within or without the district, are included with the other deaths in the columns for the several age groups (columns 2-8). They are also, in columns 9-12, included among the deaths in their respective "Localities" according to the previous addresses of the deceased as given by the Registrars. Deaths of "Non-residents" occurring in public institutions in the district are in like manner excluded from columns 2-8 and 9-12 of Table IV.

(b) See notes on Table I as to the meaning of "Residents" and "Non-residents," and as to the "Public Institutions" taken into account for the purposes of these Tables. The "Localities" in Table IV. are the same as those in Tables II. and III.

(c) All deaths occurring in public institutions situated within the district, whether of "Residents" or of "Non-residents," are, in addition to being dealt with as in note (a), entered in the last column of Table IV. The total number in this column equals the figures for the year in column 9, Table I.

(d) The total deaths in the several "Localities" in columns 9-12 of Table IV. equal those for the year in the same localities in Table II., sub-columns c. The total deaths at all ages in column 2 of Table IV. equal the gross total of columns 9-12 and the figures for the year in column 12 of Table I.

(e) Under the heading of "Diarrhoea" are included deaths registered as due to Epidemic diarrhoea, Epidemic enteritis, Infective enteritis, Zymotic enteritis, Summer diarrhoea, Dysentery and Dysenteric diarrhoea, Choleraic diarrhoea, Cholera and Cholera Nostras.

Deaths from Diarrhoea secondary to some other well-defined disease are included under the latter.

(f) Under the headings of "Cancer" and "Puerperal fever" are included all registered deaths from causes comprised within these general terms.

(g) Under "Congenital Defects" in Table V. are included deaths from Atelectasis, Icterus neonatorum, Navel haemorrhage, Malformations and Congenital hydrocephalus.

(h) Under "Tuberculous Meningitis" are included deaths from Acute hydrocephalus.

(i) Under "Other Tuberculous Diseases" are included deaths from Tuberculosis, Tuberculosis of bones, joints and other organs, Lupus and Scrofula.

(j) All deaths certified by Registered Medical Practitioners and all Inquest cases are classed as "Certified"; all other deaths are regarded as "Uncertified."

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In recording the facts under the various headings of Tables I., II., III., IV., and V., attention has been given to the notes on the Tables.

JOHN J. WEAVER,

Medical Officer of Health

January 18th, 1909.

TABLE V.

**Infantile Mortality during the Year 1908.**  
**Deaths from stated Causes in Weeks and Months under One Year of Age.**

COUNTY BOROUGH OF SOUTHPORT.

See Notes at back of Table IV.

All Causes.	CAUSE OF DEATH.	Total Deaths under One Year																
		1-2 Weeks Under 1 Week	2-3 Weeks	3-4 Weeks	Total under 1 Month	1-2 Months	2-3 Months	3-4 Months	4-5 Months	5-6 Months	6-7 Months	7-8 Months	8-9 Months	9-10 Months	10-11 Months	11-12 Months		
All Causes.	Certified ..... Uncertified .....	23	2	4	6	35	8	6	7	8	1	5	4	3	3	7	3	90
1. Common Infectious Diseases.	Small-pox ..... Chicken-pox ..... Measles ..... Scarlet Fever ..... Diphtheria (including Membranous Croup) .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
2. Diarrhoeal Diseases.	Diarrhoea, all forms ..... Enteritis, Muco-Enteritis, Gastro-Enteritis .....	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	
3. Wasting Diseases.	Gastritis, Gastro-intestinal Catarrh .....	...	...	1	...	...	...	...	...	...	1	...	...	1	1	1	1	
See notes to Table IV.	Premature Birth .....	14	...	3	17	1	1	...	...	...	...	...	...	...	...	...	...	
4. Tuberculous Diseases.	Congenital Defects ..... (See notes to Table IV.) Injury at Birth .....	1	2	...	3	...	1	...	...	...	...	...	...	...	...	...	...	
	Want of Breast-milk, Starvation .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Aatrophy, Debility, Marasmus .	4	...	2	2	8	2	1	2	3	...	1	2	...	...	...	19	
	Tuberculous Meningitis .....	...	...	...	...	...	...	1	...	1	...	1	...	1	...	1	...	
	(See notes to Table IV.) Tuberculous Peritonitis : Tabes Mesenterica .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Other Tuberculous Diseases .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	(See notes to Table IV.) Erysipelas .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Syphilis .....	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	
	Rickets .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Meningitis (not Tuberculous) .	...	...	1	1	...	...	...	...	...	...	...	...	...	...	1	2	
5. Other Causes	Convulsions .....	1	...	...	1	2	...	...	...	...	1	...	...	1	...	...	4	
	Bronchitis .....	...	...	...	1	...	2	3	1	1	...	...	...	...	...	...	8	
	Laryngitis .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Pneumonia .....	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3	
	Suffocation, overlaying .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Other Causes .....	3	...	...	3	...	1	...	1	1	1	1	1	1	1	1	7	
		24	2	4	6	36	9	6	7	8	1	5	4	3	3	7	92	

Deaths in the year of  
{ legitimate, 868  
Births in the year { illegitimate, 30

Deaths from all Causes at all Ages, 706.

Population (estimated to middle of 1908) 53,318.

Deaths in the year of  
{ legitimate infants, 87  
illegitimate infants, 5



TABLE VI.

Showing the total number of cases of Infectious Disease notified in the Borough, and the Deaths resulting therefrom, during the last 10 years (1899-1908).  
It includes the Deaths which occurred both in the Borough and in the Borough Infectious Diseases Hospital (outside the Borough).

	NUMBER OF CASES OF INFECTIOUS DISEASE NOTIFIED.										Total Cases for 10 years, 1899 to 1908.	DEATHS FROM INFECTIOUS DISEASE.										Case Mortality (of all cases) in Borough and Borough Hospital for 10 years, 1899 to 1908.	
	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.		1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	Total Deaths during 10 years 1899 to 1908.	
Scarlet Fever.....	177	237	230	131	162	333	247	180	88	104	1889	6	4	7	3	7	10	3	10	2	1	53	2.81 per cent.
Small-pox .....	...	1	...	...	9	7	...	...	...	...	17	...	...	...	1	2	...	...	...	...	...	3	...
Diphtheria .....	42	19	59	26	23	36	31	40	19	34	338	4	2	12	4	2	2	5	3	4	9	54	15.98 ,,
Membranous Croup .....	2	...	3	4	...	...	...	...	...	...		2	...	3	2	...	...	...	...	...	...		
Typhus .....	...	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	
Typhoid Fever .....	44	38	33	31	21	10	10	13	13	16	229	10	8	9	4	7	...	2	1	3	2	46	20.08 ,,
Continued Fever .....	...	...	1	1	...	...	1	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	
Erysipelas.....	15	19	23	34	39	32	22	35	27	17	263	...	...	1	1	1	...	...	3	3	...	9	3.42 ,,
Puerperal Fever .....	2	1	4	3	3	1	2	1	...	1	18	1	...	1	1	1	1	1	...	1	7	38.88 ,,	
*Chicken Pox .....	...	...	...	58	194	217	99	107	81	163	...	...	...	...	...	...	...	...	...	...	...	...	
Measles .....	...	...	...	602	846	504	627	278	449	189	...	4	2	1	7	12	9	6	4	7	2	54	1.34† ,, $\frac{1}{2}$
Whooping Cough .....	...	...	...	138	537	233	70	210	227	348	...	15	5	16	5	13	5	1	3	4	6	73	2.10† ,, $\frac{1}{2}$
Totals .....	282	315	353	1028	1834	1374	109	864	904	872	...	42	21	50	27	44	29	18	24	23	21	299	...

\*Chicken Pox, Measles, and Whooping Cough were made compulsorily notifiable in Southport on May 8th, 1902.

†Calculated for the last seven years only, during which time Measles and Whooping Cough have been compulsorily notifiable in Southport.



TABLE VII.—Cases of Infectious Disease treated in the Borough Infectious Diseases Hospital during the last 10 years, 1899 to 1908.

	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	Totals for the 10 years, 1899 to 1908.
Scarlet Fever.....	101	147	160	92	121	261	177	142	60	79	1340
Small-pox .....	...	I	...	...	8	7	...	...	...	...	16
Diphtheria .....	13	2	15	6	2	3	11	18	6	23	99
Typhoid Fever .....	7	7	14	12	11	I	3	2	4	4	65
Continued Fever .....	...	...	...	I	...	...	...	...	...	...	I
Erysipelas .....	I	...	...	v	...	...	...	...	...	...	I
Puerperal Fever .....	...	...	I	...	...	...	...	...	...	...	I
Measles .....	I	...	...	...	...	...	...	...	...	...	I
German Measles .....	...	...	...	...	...	...	...	...	...	...	...
Chicken Pox .....	...	...	...	2	2	...	...	...	...	...	4
Totals .....	123	157	190	113	144	272	191	162	70	106	1528
Deaths occurred among the above cases as follows :—											
Scarlet Fever.....	5	2	4	2	6	8	3	10	2	I	43
Small-pox .....	...	...	...	...	...	2	...	...	...	...	2
Diphtheria .....	2	...	2	I	...	...	...	2	...	...	14
Typhoid Fever .....	2	2	4	I	3	...	I	...	2	2	17
Measles .....	...	...	...	...	...	...	2	...	...	...	2
Totals .....	9	4	10	4	9	10	6	12	4	10	78



TABLE VIII.

**Vital Statistics.—Borough of Southport. (Thirty-seven Years.)**

NOTE.—The figures given in this Table, except in columns distinguished as "native" or "local," are gross figures, without correction, and on that account may in some cases be found to differ from the figures given in Tables I. to IV., which are corrected in accordance with the requirements of the Local Government Board, as stated in the notes appended to them.

YEAR.	BIRTHS.		DEATHS.						Bad Lives Imported	DEATHS FROM												DEATHS OF PERSONS AGED,						ANNUAL RATES PER THOUSAND LIVING.						Population. (Estimated to Middle of Year).			
	Male.	Female.	Male.	Female.	Resident more than One Year.	Resident less than One Year.	Seven Zymotic Diseases.	Small Pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Fever.	Diarrhoea	Cholera and Choleraic Diarrhoea	Diseases of the Respiratory Organs.	Phthisis.	Violence.	Imported Phthisis.	Imported Diseases of the Respiratory Organs.	Deaths in Public Institutions.	Deaths under One Year of Age to 1000 Births.	0—1.	1—5.	5—15.	15—25.	25—60.	60 and upwards.	Births.	Deaths, Gross.	Deaths, Local.	Deaths, Native Phthisis.	Deaths, Zymotic.	Deaths, Respiratory Organs, Gross.	Deaths, Diseases of Respiratory Organs, Local.		
										Seven Zymotic Diseases.	Small Pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Fever.	Diarrhoea	Cholera and Choleraic Diarrhoea	Diseases of the Respiratory Organs.	Phthisis.	Violence.	Imported Phthisis.	Imported Diseases of the Respiratory Organs.	Deaths in Public Institutions.	Deaths under One Year of Age to 1000 Births.	0—1.	1—5.	5—15.	15—25.	25—60.	60 and upwards.	Births.	Deaths, Gross.	Deaths, Local.	Deaths, Native Phthisis.	Deaths, Zymotic.	Deaths, Respiratory Organs, Gross.
1871	264	242	221	203	—	—	—	65	24	3	5	2	6	15	10	1	56	59	11	—	—	38	170	86	47	20	37	140	94	27.97	23.44	—	3.59	—	3.09	—	18,086
1872	282	271	223	220	343	100	73	40	6	1	2	1	8	11	11	—	59	72	8	21	7	27	170	94	56	23	25	152	93	29.34	23.50	19.63	2.12	2.70	3.13	2.76	18,846
1873	278	300	230	220	353	106	65	78	—	1	32	—	3	22	20	—	58	68	9	33	8	32	164	95	50	39	24	139	112	29.43	23.37	20.06	3.97	1.78	2.95	2.64	19,638
1874	331	291	257	248	387	118	85	81	—	15	27	—	3	22	14	—	64	66	15	34	11	28	178	111	67	32	21	181	93	30.39	24.67	20.52	3.95	1.56	3.13	2.59	20,463
1875	336	331	306	287	475	118	81	70	1	—	7	1	6	39	16	—	90	87	12	27	13	31	183	123	55	27	43	193	152	28.81	25.65	22.14	3.02	2.59	3.89	3.33	23,113
1876	439	424	326	305	485	146	102	85	27	1	—	5	1	33	18	—	93	83	14	34	23	44	153	132	44	28	51	215	161	33.19	24.27	20.34	3.27	1.88	3.57	2.69	25,997
1877	463	456	291	329	503	117	106	53	1	1	2	17	5	13	14	—	104	75	17	25	20	22	123	113	67	39	34	202	165	33.87	22.85	18.94	1.95*	1.84	3.83	3.09	27,132
1878	481	444	332	314	518	128	111	70	—	4	14	7	—	14	31	—	94	87	16	32	14	20	151	140	70	29	37	200	170	32.66	22.81	18.89	2.47	1.94	3.32	2.82	28,317
1879	461	465	289	328	511	106	89	25	—	1	5	2	7	2	8	—	134	68	16	19	17	29	124	115	63	26	36	213	164	31.33	20.87	17.86	.84	1.65	4.53	3.95	29,554
1880	470	452	340	367	610	97	81	49	—	4	4	3	18	7	13	—	119	70	13	22	10	26	190	176	86	33	32	200	180	29.89	22.92	20.29	1.58	1.55	3.85	3.53	30,845
1881	457	460	290	278	462	106	90	44	—	5	11	6	5	10	7	1	94	73	13	28	12	24	100	92	76	27	30	173	170	28.48	17.64	14.84	1.36	1.39	2.92	2.55	32,191
1882	451	421	263	289	450	102	91	34	—	—	15	7	4	6	2	—	108	72	8	24	17	24	119	104	73	39	27	166	143	26.24	16.61	13.87	1.02	1.44	3.25	2.74	33,232
1883	438	411	423	335	558	100	93	51	—	8	7	4	18	6	8	—	144	72	10	17	7	29	134	114	85	30	38	195	196	24.97	19.35	16.61	1.50	1.61	4.23	4.03	34,077
1884	460	416	315	302	511	106	87	36	—	3	3	10	3	5	11	1	103	78	16	20	11	25	132	116	70	25	37	164	205	25.07	17.66	15.17	1.03	1.66	2.95	2.63	34,944
1885	453	419	317	317	517	117	93	37	—	4	3	8	12	5	5	—	108	65	20	19	15	28	141	123	71	24	27	193	196	24.34	17.72	15.10	1.03	1.28	3.01	2.60	35,833
1886	509	415	324	316	544	96	82	21	—	1	3	5	5	1	6	—	100	77	24	18	5	29	140	129	40	28	31	186	226	25.15	17.42	15.19	.57	1.61	2.72	2.59	36,745
1887	413	413	316	362	575	103	85	36	—	10	6	7	4	4	5	—	105	67	20	17	8	33	151	125	59	30	40	190	234	21.92	17.99	1					

